WILL CO.
L1971100002
Celotex Corp. Dump
ILD 981961634

Site Team Evaluation Prioritization

CERCLA Report

Illinois Environmental Protection Agency

2200 Churchill Road
P. O. Box 19276
Springfield, IL 62794-9276

CERCLA SITE TEAM EVALUATION PRIORITIZATION

for:

CELOTEX CORPORATION DUMP SITE
WILMINGTON, ILLINOIS

PREPARED BY:
ILLINOIS ENVIRONMENTAL PROTECTION AGENCY
BUREAU OF LAND
REMEDIAL PROJECT MANAGEMENT SECTION
SITE ASSESSMENT UNIT

MAY 1997

SITE TEAM EVALUATION PRIORITIZATION
CELOTEX CORPORATION DUMP SITE

TABLE OF CONTENTS

APPENDIX

A. Four Mile Map

B. Wetland Map

C. Target Compound List (TCL) and USEPA Data Qualifies

D. 1989 and 1995 CERCLA Inspection Results

E. CERCLA Inspection Photographs

F. Analytical Results (under a separate cover)

1. SITE BACKGROUND

1.1 INTRODUCTION

On September 30, 1994 the Illinois Environmental Protection Agency's CERCLA Site Assessment Program was tasked by the U.S. Environmental Protection Agency (USEPA) to conduct a Site Team Evaluation Prioritization (STEP) of the Celotex Corporate Dump Site.

This investigation was undertaken by the authority of the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA), 40 CFR, 1980 as amended by the Superfund Amendments and Reauthorization Act (SARA) of 1986.

The Celotex Dump Site located in Wilmington, Illinois was initially placed on the Comprehensive Environmental Response Compensation and Liability Inventory System (CERCLIS) in response to the State of Illinois concerns that past site activities may have caused soil and sediment contamination of the surrounding community, on-site wetlands and the Kankakee River. In July of 1996 the Illinois EPA's CERCLA Site Assessment Unit prepared a Site Team Evaluation Prioritization Work Plan for Celotex which was submitted to the Region 5 Offices of USEPA for review. A site safety plan was also prepared at this time and after being reviewed by the Illinois EPA's Office of Chemical Safety, the field activity portion of the inspection occurred on August 21 and 22, 1996. The CERCLA Inspection included the collection of seven soil samples and one groundwater sample.

1.2 SITE DESCRIPTION

The site is located just east of the Kankakee River on Kankakee Street in Wilmington, Illinois. Celotex operated a solid waste disposal site on a forty-acre parcel of land located at the NW 1/4 of the NW 1/4 of Section 25, Township 33 North, Range 2 East in Will County. This disposal area consists of two landfills, two surface depressions, and several unlined disposal lagoons. The landfills appear to be inactive, covered and vegetated. The lagoons contain three to four feet of clear water and lack emergent and surficial animal and plant life. This entire area is prone to flooding from the Kankakee River on the west and from the Forked Creek on the South. The site is bordered on the northwest and east by residential areas. These residential areas provide several points of access to the site. Paths are easily found throughout this area showing some possible recreational use of the site.

1.3 SITE HISTORY

According to Illinois Environmental Protection Agency files Celotex operated a manufacturing facility on the southern side of the Forked Creek from 1955 till the mid- 1980's. The primary products from this operation were roofing shingles and felt paper. Wastes generated from this plant were then disposed of on the above mentioned property and included: off-specification roofing shingles, felt paper, wooden pallets and liquid sludge from a recycling mill. This liquid sludge is a by-product from the recycling of rags, magazines, wood pulp, and paper.

In 1979 a site visit by Illinois EPA personnel revealed a load of waste oil staged next to a surface depression and an oil stained area that possibly had wastes deposited there before. In this same year a 30,000 gallon spill of asphalt material at the plant was cleaned up and disposed of at this

dump site.

An enforcement case was started in 1978 against Celotex based on a history of compliance violations. This complaint alleged that the waste disposal site used by Celotex (the corporate dump site) was not operated within the current regulations applicable to it. These charges were later dismissed because the Attorney General failed to comply with discovery orders and due to inadequate documentation.

1.4 REGULATORY STATUS

Regulatory involvement at this site is limited to the above mentioned activities by the Illinois EPA and the Attorney General's Office. The Celotex Corporation Dump Site was never regulated under the Resource Conservation Recovery Act (RCRA), and given the nature of the operation, the years it produced roofing materials, and the federal and state environmental regulations which existed during this time, the site in all likelihood would not fall under the jurisdiction of the Atomic Energy Act (AEA), Toxic Substances Control Act (TSCA), Federal Insecticide, Fungicide, and Rodenticide Act (FIFRA), or the Uranium Mill Tailings Radiation Control Act (UMTRCA).

2 STEP ACTIVITIES

This section contains information gathered during the preparation of the formal CERCLA Inspection and previous IEPA activities involving this site. These activities included the reviewing of Illinois EPA records, preparation of the work plan and interviews with a

representative from the Celotex Corporation.

2.1 RECONNAISSANCE ACTIVITIES

In August 1996, Mr. Mark Wagner met with Mr. Lecil Colburn, Environmental Director for the Celotex Corporation, and conducted a pre-sampling reconnaissance inspection. This event was conducted to identify the sampling locations and familiarize the sampling team with the site. At this time several locations were found with exposed shingles and associated materials and it was also noticed that the perimeter fence was in poor condition and absent in numerous places. Current site conditions included heavy vegetation in non-disposal areas, and low water levels in the wetland areas and in the Kankakee River.

2.2 INTERVIEWS

As mentioned earlier Celotex's Environmental Director met with the author prior to the inspection. At this time CERCLA program objectives were discussed. Mr. Colburn was familiar with the CERCLA process and exercised Celotex's option to split samples with the IEPA.

2.3 SAMPLING ACTIVITIES

The CERCLA Site Team Evaluation Prioritization field sampling activities took place on August 21 and 22, 1997. One groundwater and seven soil samples were collected during this segment of the inspection. All sampling was performed in accordance with IEPA sampling methods and procedures. The soil samples were taken to determine if contaminants were present on-site.

Figure 3, identifies the sample locations from the August 1997, STEP, and sample descriptions are summarized in Table 1.

2.4 SAMPLING RESULTS

All samples were analyzed for Target Compound List (TCL) parameters. Several pesticides, PCBs, volatile organic compounds and inorganic substances were detected at numerous sample locations. One of these sample locations had Aroclor-1242, zinc, cyanide and copper levels three times the background concentrations. Key samples with levels and contaminants are presented in Table 2.

A previous CERCLA investigation also found elevated copper levels at six sediment sample locations throughout the site, the wetland areas and in the Kankakee River. Five of these six sample locations exceeded the Lowest Effect Level established by the Ontario Standards for Copper. Three of the six sample locations also exceeded the Lowest Effect Level for Manganese.

The complete analytical data package for Celotex is located in Appendix E and contains a copy of the Target Compound List (TCL) and data qualifiers used by USEPA.

3 SITE SOURCES

CERCLA activities have identified two sources at Celotex. They are a landfill and surface impoundment. Due to the limited scope of these screening activities, the possibility exists that further investigation of the site could reveal additional information that would further characterize these sources, or lead to the identification of additional sources.

3.1 SOURCE DEFINITION

Celotex Landfill:

The landfill was identified in aerial photographs and in a 1989 Screening Site Inspection Report. This area is approximately 22 acres in size and was not an engineered disposal area. This area was utilized after a smaller landfill located to the south was filled to capacity. Runoff from this area collects in two wetlands that each empty into the Kankakee River. Inorganics, mainly copper have been detected along both of these surface water paths. In Figure 3 it is referred to as the recent landfill.

As mentioned earlier the smaller landfill was the original area used as a disposal area by Celotex. Leachate previously sampled from it did not reveal the elevated levels found in the larger landfill. This area is prone to flooding from the Forked Creek. Several feet of various materials now cover this smaller landfill.

Celotex Surface Impoundment:

The surface impoundment is also visible in the aerial photographs. It is approximately one acre in size and is located at the north western edge of the above mentioned 22 acre landfill.

According to previous CERCLA inspections this impoundment originated as a low-lying area and was used to dispose of asphalt and other unknown materials. Previous sampling of it detected octa-chlorinated dioxins and furans three times the background concentrations.

4 MIGRATION PATHWAYS

4.1 SURFACE WATER PATHWAY

The surface pathway starts where surface water run off from the site enters the first perennial water body. This location is referred to as the probable point of entry (PPE). Celotex has two probable points of entry due to the location of the on-site wetlands. The point where surface water runoff enters these wetlands are the probable points of entry for the site.

These wetlands are contiguous to the Kankakee River. The 15 mile Target Distance Limit for this water body is a 15 mile stretch that terminates downstream on the Illinois River near Goose Lake. As mentioned earlier several sediment samples for this pathway contains copper and manganese at levels significantly higher than the Ontario Sediment Guidelines for Lowest Effects.

The wetlands associated with the site are listed by the Illinois Department of Conservation and the United States Department of the Interior. They are classified as a palustrine, forested, broad-leaved deciduous, temporarily and seasonally flooded environments. (See Appendix B, Area Wetland Map.)

The Kankakee River is a fishery and is also a source of drinking water for the City of Wilmington. The surface water intakes are upstream of the PPE and do not appear to be affected by the site.

4.2 SOIL EXPOSURE PATHWAY

This pathway evaluates surficial contamination and the likelihood that people and sensitive environments will be exposed to them. The site is fenced along its west, south, and eastern sides leaving the north boundary open and accessible to the public. The eastern side of the fence is also breached at the end of Hayden Court. Throughout the site are walking or bicycling paths that are well defined indicating frequent use.

The surface of the site has: off-specification products, lose gravels and sands, silty-loams, clay and is sparsely vegetated in the landfill area. All of the landfilled areas appear to lack adequate cover material.

Findings from the 1989, Site Inspection revealed the presence of arsenic, barium, cadmium, chromium, lead, and zinc on the surface of the site. Octa-chlorinated dioxins and furans were also detected in the surface impoundment during the 1995, inspection. The results from these inspections can be found in Appendix D. Approximately 4500 people live within a one mile radius of the site and there are no schools or day care facilities within 200 feet of the site.

4.3 GROUNDWATER PATHWAY

The geology of the area consists of a shallow sand and gravel aquifer ranging from 70-135 feet in thickness underlain by Silurian Dolomite. Separating these two aquifers is a confining layer of blue shale and blue clay. The shallow sand and gravel aquifer is the aquifer of concern (AOC). Underlying the glacial-drift is the Ft. Atkinson Limestone and Scales Shales, and the Galena and Platteville Groups.

Residents using private wells are the primary users of groundwater in the Wilmington area. These wells range from approximately 15-80 feet in depth, (sand and gravel) and approximately 150-700 feet in depth (Silurian Dolomite). The closest known private well is located approximately 2000 feet southeast of the site on the opposite side of the Kankakee River. Due to the location of this well and other private wells in the area no drinking water samples were collected during this CERCLA STEP Inspection. One on-site monitoring well was sampled and revealed several inorganic analytes and one semivolatile compound.

4.4 AIR PATHWAY

Residential areas border the eastern side of the site. There is no air related complaints on file with the Illinois EPA, and the landfill operation would not generate significant air emissions. No formal air samples were collected but air monitoring was performed for screening purposes. Both the photo-ionization (PID) and flame-ionization (FID) methods were utilized, with the FID being more responsive to the conditions at the site.

Wind erosion of the surface soils is also minimal except during high winds due to the particle size and soil types of the contaminated soils.

5.0 ADDITIONAL RISK-BASED OBJECTIVES

This section discusses additional screening objectives used to evaluate the Celotex Corporation Dump site. These objectives have not been used to assess the site for Hazard Ranking System (HRS) purposes.

5.1 TIERED APPROACH TO CORRECTIVE ACTION OBJECTIVES (TACO)

The Illinois EPA's TACO guidance document (proposed rules under 35 IL Adm. Code Part 742), can be used to develop site specific remediation objectives for sites being addressed under the Illinois Site Remediation Program. This document discusses key elements required to develop risk-based remediation objectives, how background values may be used, and provides guidance through three tiers of the risk-based approach. The Illinois EPA uses this guidance, and the groundwater standards established in 36 IL Adm. Code 620, to determine soil and groundwater remediation objectives.

5.1.1 TACO Soil Objectives

The soil contaminants from the 1996 CERLCA investigation will be compared to the soil corrective action objectives established for residential properties, with the inhalation, ingestion, and migration to groundwater pathways each evaluated. Tier 1 consists of "look-up" tables, which considers limited site-specific information and are based on simple numeric

models.

Four on-site soil samples had PCB levels above the Tier 1 objective for a residential scenario. Arsenic was also reported above the clean objective at all six of the on-site sample locations.

5.1.2 TACO Groundwater Objectives

The author of this report has concluded that groundwater beneath the facility can be classified as Class II groundwater. The decision was based upon the fact that the site contained no potable water supply wells within the minimum setback zone and the drinking water from the area is supplied by the Kankakee River.

The groundwater sample detected levels of bis (2-ethylhexyl) phthalate, barium, copper, cyanide, and lead which exceeded Class II groundwater corrective action objectives.

5.2 ONTARIO AQUATIC SEDIMENT QUALITY GUIDELINES

The concentrations of contaminants found in the sediment samples previously collected from the on-site wetlands and the Kankakee River were compared to Ontario Aquatic Sediment Quality Guidelines. These sediment quality guidelines are non-regulatory ecological benchmark values that serve as indicators of potential aquatic impacts. The Lowest Effect Level (LEL) indicates sediment contamination that can be tolerated by the majority of the benthic organisms. The Severe Effect Level (SEL) represents heavily polluted conditions that are expected to be detrimental to the health of benthic organisms.

Copper levels exceeded the LEL in six of seven sediment samples collected in 1995. The remaining sample location reported manganese levels in excess of the SEL.

5.3 ECOTOX THRESHOLDS

USEPA Ecotox Thresholds are ecological benchmarks that are media-specific contaminant concentrations and are used as an indicator of possible adverse ecological effects that may warrant further site investigation. Ecotox Thresholds are to be used for screening purposes and are not regulatory criteria, site-specific cleanup standards or remediation goals.

The screening level for arsenic was exceeded in one sediment sample collected from an on-site wetland area.

TABLE 1

SAMPLE DESCRIPTIONS

CELOTEX CORPATE
DUMP SITE
ILD 981961634

SAMPLE	DEPTH	APPEARANCE	LOCATION
X101	0-4"	Sandy-loam	South Park Wilmington, Illinois
X102	NR	Dark loam-clay	West side of fill area
X104	12-18"	Gray clay with plastic material some shingles	North side of fill area, runoff leading to wetland area
X105	6-8"	Waste sample, felt paper mineral surface roll	North of main access road in fill area stressed vegetation
X106	6-12"	Gray clay shingles, felt paper	East side of fill area, runoff to swamp area and eastern depression
X107	8-18"	Light gray material mix of shingle granuals	South side of western depression
X108	18"	gray clay, with sand and shingle granuals	South side of eastern depression

SITE NAME

Celotex Corp. Dump Site

ILD 981961634

KEY SOIL SAMPLE SUMMARY
TABLE 2

SAMPLING POINT	X101	X102	X104	X105	X106	X107	X108
PARAMETER	ebwt6	ebht7	ebht3	ebht4	ebht5	ebhw5	ebhw6
PESTICIDES / PCB							
Dieldrin	--	NA	--	5.3	--	70	--
Endosulfan sulfate	--	NA	--	--	--	5.3P	--
4,4'-DDT	--	NA	--	--	--	8.8P	--
Endrin Ketone	--	NA	--	--	--	5.3P	--
alpha-Chlorodane	--	NA	--	--	--	30	--
Aroclor-1242	54	NA	72P	330P	27JP	3400PE	--
INORGANICS	X101	X102	X104	X105	X106	X107	X108
	meaqc9	ebht7	meaqd2	meaqd3	meaqd4	meaqd5	meaqd6
Aluminum	6040	NA	5320	5320	6130	6420	5570
Arsenic	5.6	NA	3.0	1.3B	2.4	1.8B	1.1B
Barium	64.0	NA	64.6	50.4	46.6	77.3	56.9
Calcium	15000	NA	44400	6940	3090	4930	4360
Chromium	11.0	NA	9.7	11.0	14.5	22.0	12.3
Copper	12.1	NA	11.9	15.1	16.4	93.9	9.3
Iron	14400	NA	14400	7980	10500	44400	6700
Lead	38.6	NA	6.3	10.7	10.2	79.2	6.4
Magnesium	7780	NA	10100	2430	2960	2060	3430
Manganese	682	NA	620	162	285	118	75.7
Mercury	0.06U	NA	0.10B	0.05U	0.06U	0.30	0.05U
Nickel	12.6	NA	10.7	8.1B	13.1	9.3B	8.1B
Selenium	1.0B	NA	0.62B	0.42U	0.58	0.55B	0.41U
Silver	1.0U	NA	3.0	1.5B	1.0U	1.2B	0.89U
Thallium	0.61U	NA	0.60U	0.55U	0.61U	0.69	0.54U
Vanadium	14.4	NA	13.2	11.7	16.9	12.4B	15.5
Zinc	82.0	NA	38.7	69.8	64.6	336	59.9
Cyanide	0.28B	NA	0.34B	0.20B	0.27B	17.9	0.03

SITE LOCATION MAP
CELOTEX CORP. DUMP
ILD 981961634

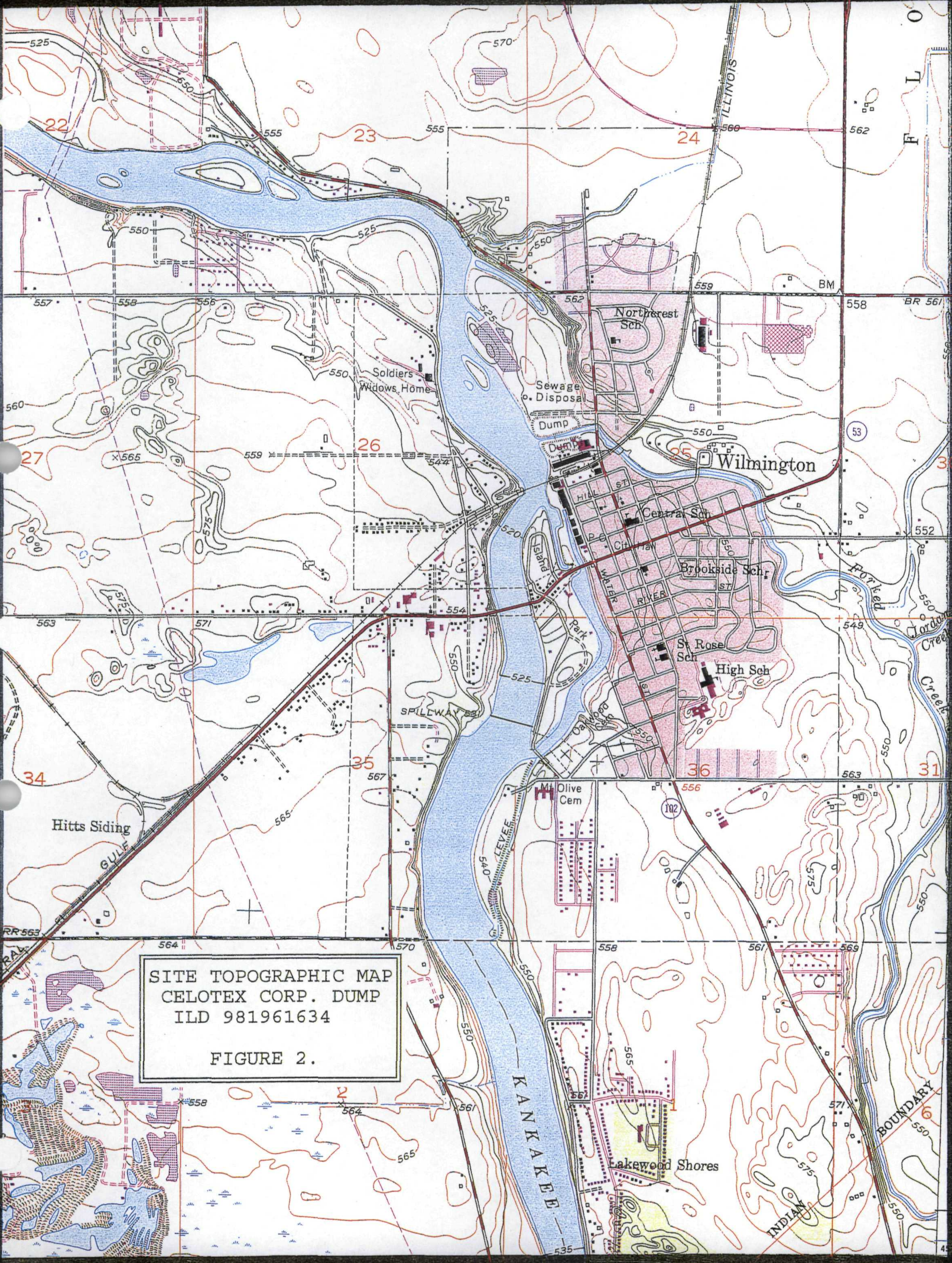
FIGURE 1.

FIGURE 3

SAMPLE LOCATION MAP

Celotex Corp. Dump Site

ILD 98196134



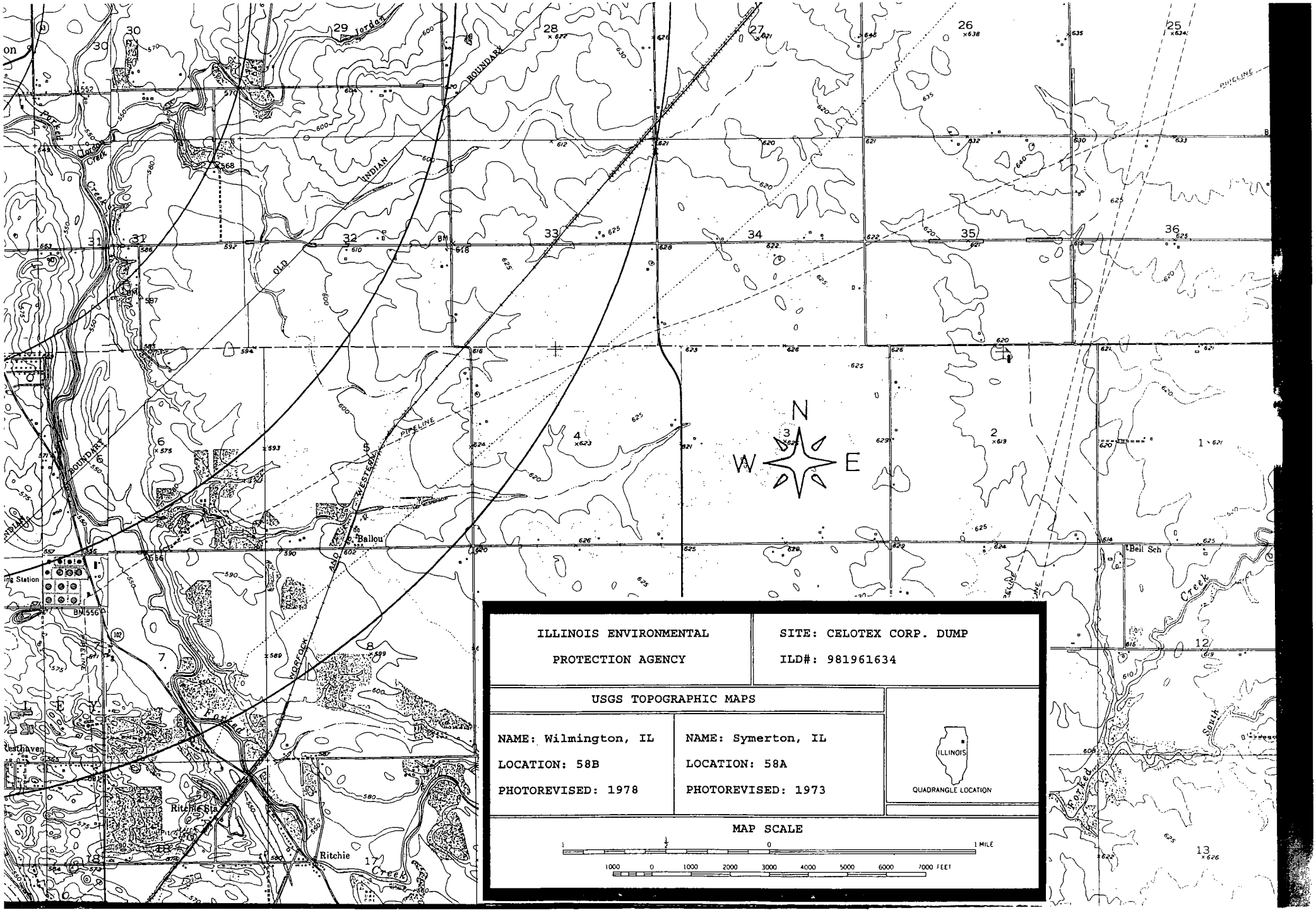
SITE TOPOGRAPHIC MAP
CELOTEX CORP. DUMP
ILD 981961634

FIGURE 2.

APPENDIX

A

FOUR MILE MAP



ILLINOIS ENVIRONMENTAL PROTECTION AGENCY	SITE: CELOTEX CORP. DUMP ILD#: 981961634
USGS TOPOGRAPHIC MAPS	
NAME: Wilmington, IL LOCATION: 58B PHOTOREVISED: 1978	NAME: Symerton, IL LOCATION: 58A PHOTOREVISED: 1973

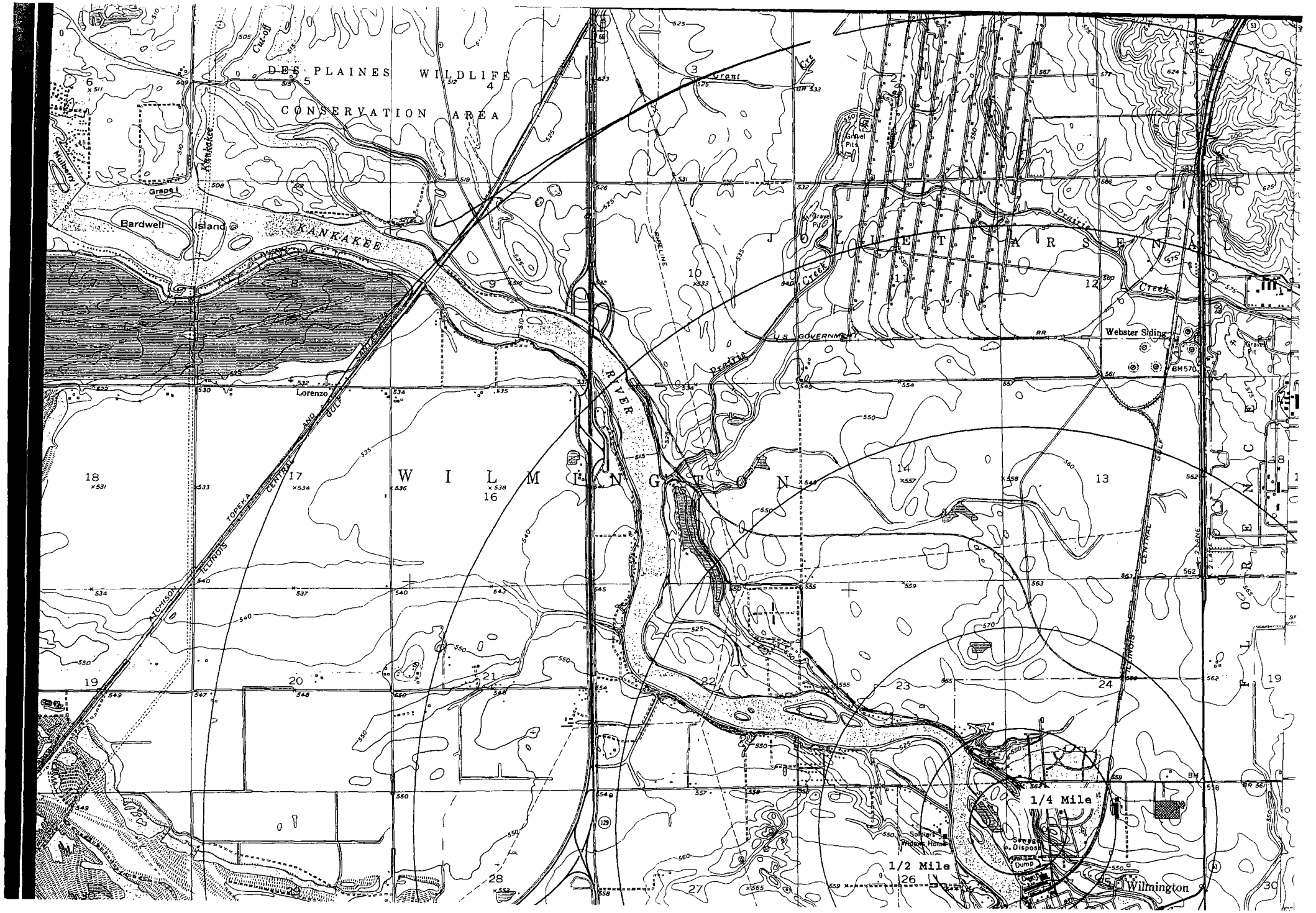
ILLINOIS
QUADRANGLE LOCATION

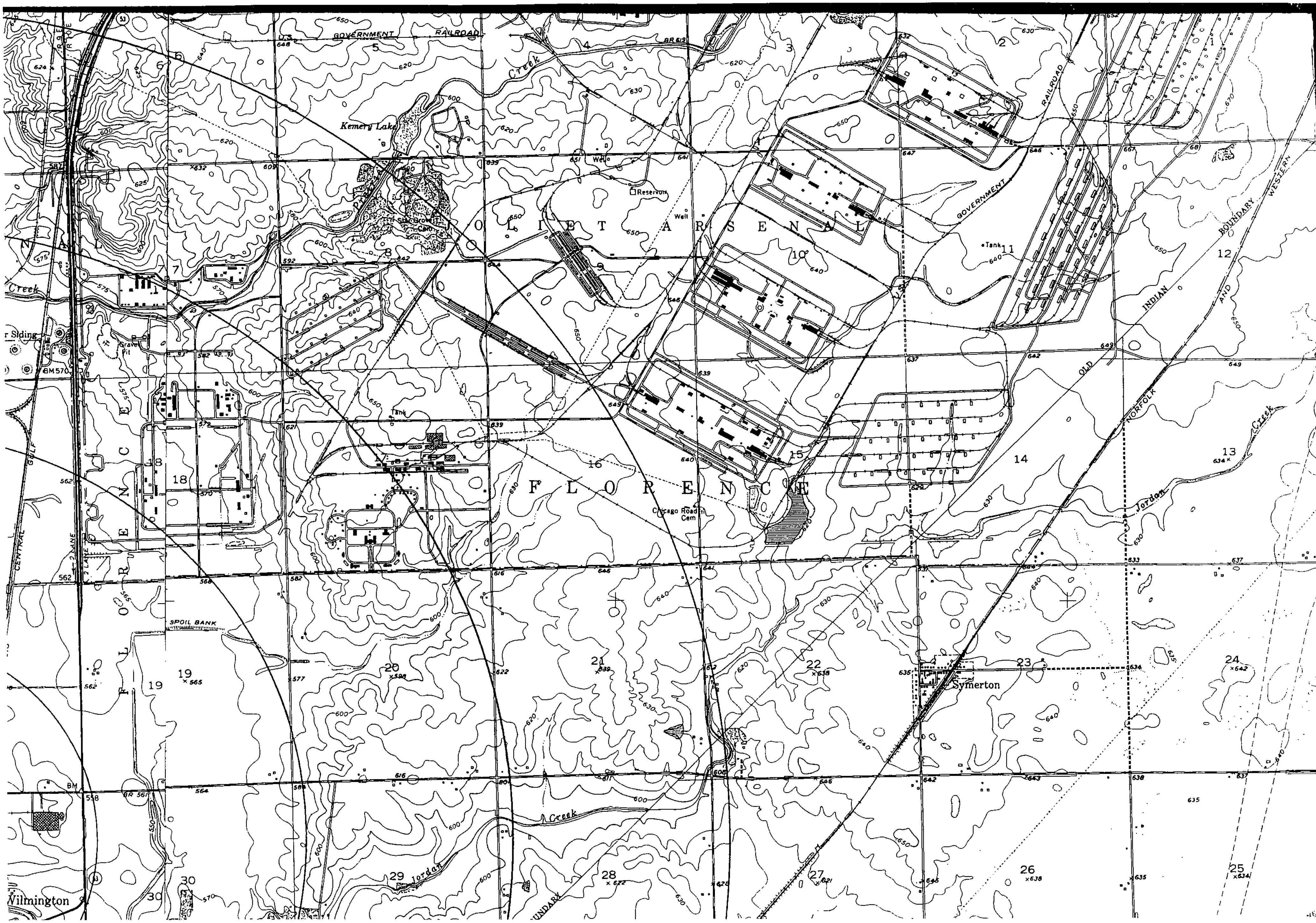
MAP SCALE

1 0 1 MILE

1000 0 1000 2000 3000 4000 5000 6000 7000 FEET

1/2 Mile
1 Mile
2 Miles
3 Miles
4 Miles
Wilmington
Central Sch
Brookside Sch
St Rose Sch
High Sch
Hitts Siding
Mt Olive Cem
Lakewood Shores
Pumping Station
Resthaven
Johnson Sch
Bohemian Cem
Braidwood
KANKAKEE
RIVER
R E E D
C U S T E R
W E S L E Y
Mine Dump
Mine Dumps
SPILLWAY
LEVEE
PIPELINE
DITCH

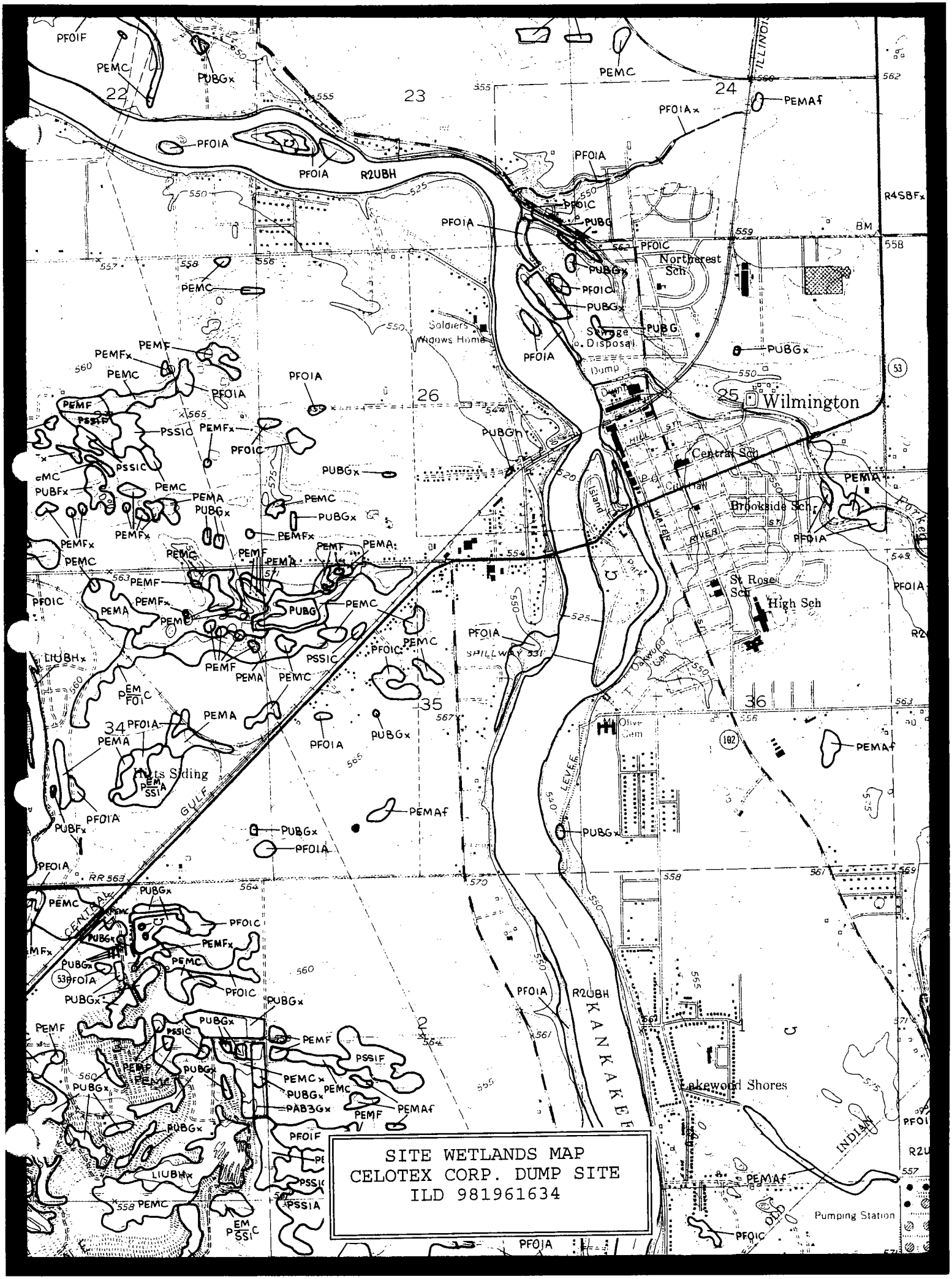

DES PLAINES WILDLIFE CONSERVATION AREA
Bardwell Island
KANKAKEE RIVER
Lorenzo
WILMINGTON
JOLIET ARSENAL
Webster Siding
Prairie Creek
Grant
Cut-off
Mulberry
Grape
Kankakee
Pipeline
U.S. GOVERNMENT
Gravel Pit
Brave Pit
TOPEKA AND SANTA FE
CHICAGO AND ILLINOIS CENTRAL
GULF
1/4 Mile
1/2 Mile
Sewage Disposal
Dump
Soldiers Home
Wilmington


JOLIET ARSENAL
FLORENCE
Kemery Lake
Symerton
Wilmington
GOVERNMENT RAILROAD
INDIAN BOUNDARY AND WESTERN
OLD NORFOLK
Jordan Creek
Chicago Road Cem
Reservoir
Well
Tank
Gravel Pit
SPOIL BANK
CENTRAL
GULF
BM 570

APPENDIX

B

SITE WETLAND MAP


SITE WETLANDS MAP
CELOTEX CORP. DUMP SITE
ILD 981961634
Wilmington
Northeast Sch
Central Sch
Brookside Sch
St Rose Sch
High Sch
Lakewood Shores
Pumping Station
Soldiers Widows Home
Sewage Disposal
Dump
Olive Cem
Hutts Siding
Island
KANKAKEE
RIVER
GULF
SPILLWAY
LEVEE
PEMC
PEMF
PEMA
PEMAf
PFO1A
PFO1C
PFO1F
PUBG
PUBGx
PUBGh
PUBFx
PEMFx
PSSIC
PSSIF
PSSIA
R2UBH
LIUBHx
R4SBFx
PABGx
RR 563
CENTRAL
INDIAN

APPENDIX

C

TARGET COMPOUND LIST (TCL) &

DATA QUALIFIERS

TARGET COMPOUND LIST

Volatile Target Compounds

Chloromethane	1,2-Dichloropropane
Bromomethane	cis-1,3-Dichloropropene
Vinyl Chloride	Trichloroethene
Chloroethane	Dibromochloromethane
Methylene Chloride	1,1,2-Trichloroethane
Acetone	Benzene
Carbon Disulfide	trans-1,3-Dichloropropene
1,1-Dichloroethene	Bromoform
1,1-Dichloroethane	4-Methyl-2-pentanone
1,2-Dichloroethene (total)	2-Hexanone
Chloroform	Tetrachloroethene
1,2-Dichloroethane	1,1,2,2-Tetrachloroethane
2-Butanone	Toluene
1,1,1-Trichloroethane	Chlorobenzene
Carbon Tetrachloride	Ethylbenzene
Vinyl Acetate	Styrene
Bromodichloromethane	Xylenes (total)

Base/Neutral Target Compounds

Hexachloroethane	2,4-Dinitrotoluene
bis(2-Chloroethyl)Ether	Diethylphthalate
Benzyl Alcohol	N-Nitrosodiphenylamine
bis(2-Chloroisopropyl)Ether	Hexachlorobenzene
N-Nitroso-Di-n-Propylamine	Phenanthrene
Nitrobenzene	4-Bromophenyl-phenylether
Hexachlorobutadiene	Anthracene
2-Methylnaphthalene	Di-n-Butylphthalate
1,2,4-Trichlorobenzene	Fluoranthene
Isophorone	Pyrene
Naphthalene	Butylbenzylphthalate
4-Chloroaniline	bis(2-Ethylhexyl)Phthalate
bis(2-chloroethoxy)Methane	Chrysene
Hexachlorocyclopentadiene	Benzo(a)Anthracene
2-Chloronaphthalene	3,3'-Dichlorobenzidene
2-Nitroaniline	Di-n-Octyl Phthalate
Acenaphthylene	Benzo(b)Fluoranthene
3-Nitroaniline	Benzo(k)Fluoranthene
Acenaphthene	Benzo(a)Pyrene
Dibenzofuran	Indeno(1,2,3-cd)Pyrene
Dimethyl Phthalate	Dibenz(a,h)Anthracene
2,6-Dinitrotoluene	Benzo(g,h,i)Perylene
Fluorene	1,2-Dichlorobenzene
4-Nitroaniline	1,3-Dichlorobenzene
4-Chlorophenyl-phenylether	1,4-Dichlorobenzene

Acid Target Compounds

Benzoic Acid	2,4,6-Trichlorophenol
Phenol	2,4,5-Trichlorophenol
2-Chlorophenol	4-Chloro-3-methylphenol
2-Nitrophenol	2,4-Dinitrophenol
2-Methylphenol	2-Methyl-4,6-dinitrophenol
2,4-Dimethylphenol	Pentachlorophenol
4-Methylphenol	4-Nitrophenol
2,4-Dichlorophenol	

Pesticide/PCB Target Compounds

alpha-BHC	Endrin Ketone
beta-BHC	Endosulfan Sulfate
delta-BHC	Methoxychlor
gamma-BHC (Lindane)	alpha-Chlorodane
Heptachlor	gamma-Chlorodane
Aldrin	Toxaphene
Heptachlor epoxide	Aroclor-1016
Endosulfan I	Aroclor-1221
4,4'-DDE	Aroclor-1232
Dieldrin	Aroclor-1242
Endrin	Aroclor-1248
4,4'-DDD	Aroclor-1254
Endosulfan II	Aroclor-1260
4,4'-DDT	

Inorganic Target Compounds

Aluminum	Manganese
Antimony	Mercury
Arsenic	Nickel
Barium	Potassium
Beryllium	Selenium
Cadmium	Silver
Calcium	Sodium
Chromium	Thallium
Cobalt	Vanadium
Copper	Zinc
Iron	Cyanide
Lead	Sulfide
Magnesium	Sulfate

SPECIAL PESTICIDE LIST

2,4-D

Atrazine

Metolachlor -- Dual

Cyanazine -- Bladex

Fonofos -- Dyfonate

EPTC -- Eptam, Eradicane

Phorate

Metribuzin -- Lexone, Sencor

Trifluralin -- Treflan

Diazinon

Alachlor -- Lasso

DATA QUALIFIERS

QUALIFIER	DEFINITION ORGANICS	DEFINITION INORGANICS
U	Compound was tested for but not detected. The sample quantitation limit must be corrected for dilution and for percent moisture. For soil samples subjected to GPC clean-up procedures, the CRQL is also multiplied by two, to account for the fact that only half of the extract is recovered.	Analyte was analyzed for but not detected.
J	Estimated value. Used when estimating a concentration for tentatively identified compounds (TICS) where a 1:1 response is assumed or when the mass spectral data indicate the presence of a compound that meets the identification criteria and the result is less than the sample quantitation limit but greater than zero. Used in data validation when the quality control data indicate that a value may not be accurate.	Estimated value. Used in data validation when the quality control data indicate that a value may not be accurate.
C	This flag applies to pesticide results where the identification is confirmed by GC/MS.	Method qualifier indicates analysis by the Manual Spectrophotometric method.
B	Analyte was found in the associated blank as well as in the sample. It indicates possible/probable blank contamination and warns the data user to take appropriate action.	The reported value is less than the CRDL but greater than the instrument detection limit (IDL).
D	Identifies all compounds identified in an analysis at a secondary dilution factor. If a sample or extract is re-analyzed at a higher dilution factor as in the "E" flag, the "DL" suffix is appended to the sample number on the Form I for the diluted sample, and all concentration values are flagged with the "D" flag.	Not used.
E	Identifies compounds whose concentrations exceed the calibration range for that specific analysis. All extracts containing compounds exceeding the calibration range must be diluted and analyzed again. If the dilution of the extract causes any compounds identified in the first analysis to be below the calibration range in the second analysis, then the results of both analyses must be reported on separate Forms I. The Form I for the diluted sample must have the "DL" suffix appended to the sample number.	The reported value is estimated because of the presence of interference.
A	This flag indicates that a TIC is a suspected aldol concentration product formed by the reaction of the solvents used to process the sample in the laboratory.	Method qualifier indicates analysis by Flame Atomic Absorption (AA).
M	Not used.	Duplicate injection (a QC parameter not met).

N	Not used	Spiked sample (a QC parameter not met).
S	Not used.	The reported value was determined by the Method of Standard Additions (MSA).
W	Not used.	Post digestion spike for Furnace AA analysis (a QC parameter) is out of control limits of 85% to 115% recovery, while sample absorbance is less than 50% of spike absorbance.
*	Not used.	Duplicate analysis (a QC parameter not within control limits).
+	Not used.	Correlation coefficient for MSA (a QC parameter) is less than 0.995.
P	Not used.	Method qualifier indicates analysis by ICP (Inductively Coupled Plasma) Spectroscopy.
CV	Not used.	Method qualifier indicates analysis by Cold Vapor AA.
AV	Not used.	Method qualifier indicates analysis by Automated Cold Vapor AA.
AS	Not used.	Method qualifier indicates analysis by Semi-Automated Cold Spectrophotometry.
T	Not used.	Method qualifier indicates Titrimetric analysis.
NR	The analyte was not required to be analyzed.	The analyte was not required to be analyzed.
R	Rejected data. The QC parameters indicate that the data is not usable for any purpose.	Rejected data. The QC parameters indicate that the data is not usable for any purpose.

APPENDIX

D

1989 & 1995 CERCLA INSPECTION RESULTS

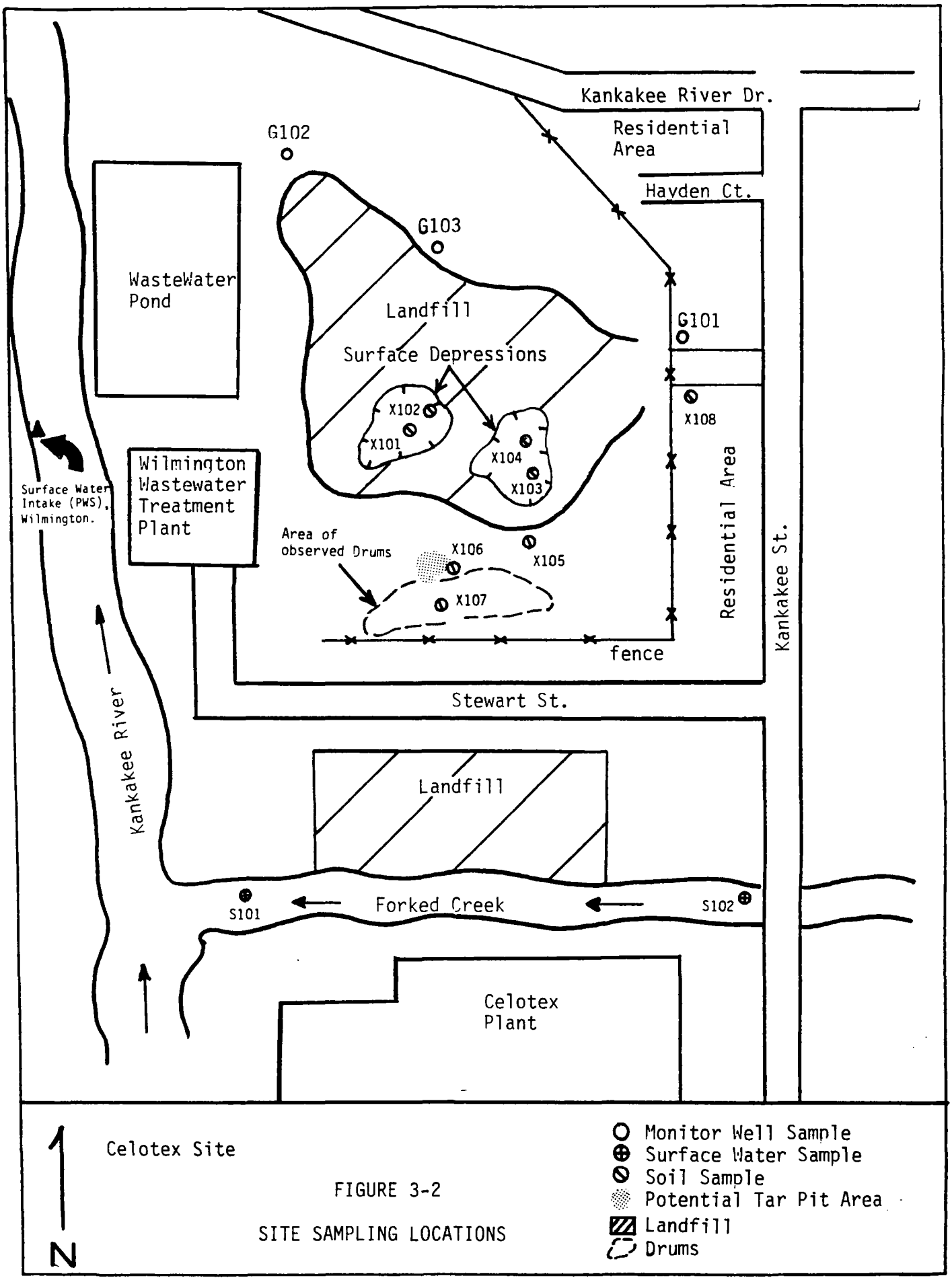


FIGURE 3-2

SITE SAMPLING LOCATIONS

Map not to Scale

Celotex Corporation
ILD 981961634

TABLE 4-1
SUMMARY

SAMPLING POINT	SB01	SB02	SB03	SS01	SS02	X101	X102D	X103	X104L	X105D	X106	X107	X108
PARAMETER	11-20-89	11-20-89	11-20-89	11-20-89	11-20-89	11-20-89	11-20-89	11-20-89	11-20-89	11-20-89	11-20-89	11-20-89	11-20-89
VOLATILES													
Methylene Chloride	--	--	--	--	--	--	--	2.00J	2.00J	4.00J	1.00J	--	--
Acetone	15.00B	68.00B	25.00B	--	60.00B	--	--	5.00J	--	44.00J	230.000	15.00J	--
2-Butanone (MEK)	--	--	--	--	--	--	--	--	--	14.00	56.00	--	--
Toluene	--	--	--	--	--	31.00	400.00J	--	--	--	57.00	--	--
SEMIVOLATILES													
Phenol	--	--	--	--	--	430.00J	--	--	--	--	--	--	--
4-Methylphenol	--	--	--	--	--	1100.00J	840.00J	--	--	--	--	--	--
Benzoic acid	--	--	--	--	--	840.00J	--	--	--	--	--	290.00J	--
Naphthalene	--	--	--	--	--	56.00	340.00BJ	--	--	--	--	--	--
2-Methylnaphthalene	--	--	--	--	--	--	1400B	--	--	--	--	--	--
Acenaphthene	--	--	--	--	--	140.00J	--	--	--	--	--	--	--
Dibenzofuran	--	--	--	--	--	50.00J	--	--	--	--	--	--	--
Diethylphthalate	--	--	0.40J	0.10J	--	--	--	28.00J	--	--	--	--	--
Fluorene	--	--	--	--	--	78.00J	--	--	--	--	--	--	--
Pentachlorophenol	--	--	--	--	--	140.00J	--	--	--	--	--	--	--
Phenanthrene	--	--	--	--	--	790.00BJ	110.00BJ	75.00BJ	8.00BJ	--	--	99.00BJ	90.00BJ
Anthracene	--	--	--	--	--	2000.00BJ	--	12.00BJ	--	--	--	--	--
Di-n-Butylphthalate	--	--	--	--	--	--	480.00BJ	87.00BJ	7.00BJ	--	--	17.00BJ	13.00BJ
Fluoranthene	--	--	--	--	--	9400.00B	--	100.00BJ	16.00BJ	--	--	150.00BJ	150.00BJ
Pyrene	--	--	--	--	--	7400.00B	--	86.00BJ	24.00BJ	--	12000.00J	210.00BJ	170.00BJ
Butylbenzylphthalate	--	--	--	--	--	--	B30J	--	--	--	--	--	--
Benzo(a)anthracene	--	--	--	--	--	2600.00BJ	--	--	--	--	--	390.00BJ	140.00BJ
Chrysene	--	--	--	--	--	2900.00B	--	--	--	--	--	--	110.00BJ
bis(2-Ethylhexyl)phthalate	1.00J	0.20B	0.80J	--	--	3800.00B	5500B	--	--	55.00BJ	--	--	110.00BJ
Benzo(b)fluoranthene	--	--	--	--	--	930.00J	--	--	--	--	--	--	--
Benzo(a)pyrene	--	--	--	--	--	670.00J	--	--	--	--	--	--	--
PESTICIDES													
Heptachlor epoxide	--	--	--	--	--	--	--	--	--	--	--	3.50J	--
Dieldrin	--	--	--	--	--	--	4.00J	1.00J	--	--	--	18.00J	--
4,4'-DDE	--	--	--	--	--	--	--	--	--	--	--	--	1.00J
4,4'-DDT	--	--	--	--	--	--	--	--	--	--	--	22.00J	--
gamma-Chlordane	--	--	--	--	--	--	--	--	--	--	--	7.00J	--
Aroclor-1260	--	--	--	--	--	550.00J	--	--	--	--	--	--	--
INORGANICS													
Aluminum	--	--	80.00B	175.00	162.00	8000.00	4200.00	6300.00	16600.00	5200.00	1470.00	8400.00	3200.00
Antimony	--	--	--	--	--	4.60	1.2	--	0.60B	--	--	0.60B	--
Arsenic	3.00B	--	51.00	--	--	1.70B	0.9B	2.20	8.60	3.50	1.8	11.00	3.00
Barium	260.00	47.00B	690.00	43.00B	43.00B	200.00	74.00	66.00	170.00	61.00	22.00B	98.00	74.00
Beryllium	--	--	--	--	--	--	--	0.50B	1.40	0.50	0.30B	0.80B	0.41B
Cadmium	--	--	2.00B	--	15.00B	--	--	3.60	9.30	3.00	0.80B	7.60	1.70
Calcium	155000.00	115000.00B	110000.00B	99000.00	98000.00	20700.00	4600.00	11200.00	34900.00	3640.00	3900.00	18700.00	4100.00
Chromium	8.00B	5.60B	8.00B	6.00B	5.80B	33.00	16.00	16.00	28.00	8.90	3.60	18.00	4.70
Cobalt	2.40B	1.80B	10.00	2.60	3.20B	2.10B	--	--	14.00	4.90B	0.90B	7.90B	3.00B
Copper	--	2.00B	--	2.40B	2.40B	120.00	45.00	14.00	51.00	10.00B	7.40	32.00	7.70
Iron	13500.00	336.00B	14000.00B	317.00	313.00	4900.00	3000.00	12600.00	32600.00	13500.00	3100.00	24700.00	6700.00
Lead	1.00B	--	--	--	--	150.00	56.00	32.00	65.00	13.00	20.00	85.00	45.00
Magnesium	68000.00	45700.00	67000.00B	41000.00	41000.00	2200.00B	1160.00B	6900.00B	12800.00	13000.00	1790.00	6700.00	1500.00
Manganese	187.00	4.60B	220.00B	15.00B	15.00B	500.00	150.00	370.00	1100.00	560.00	44.00	600.00	370.00
Mercury	--	--	--	--	--	0.10	0.17	--	0.15	0.11	--	0.14	.02B
Nickel	--	--	27.00B	--	--	7.10B	2.9B	11.00	29.00	10.00	12.00	34.00	5.80B
Potassium	29000.00	380.00B	4300.00B	1300.00B	1300.00B	--	--	680.00B	1500.00	320.00B	120.00B	1100.00B	550.00B
Silver	--	--	--	--	2.30	--	--	--	--	--	--	--	--
Sodium	19000.00	128000.00B	89000.00	11000.00	11000.00	390.00	1000B	230.00B	160.00	150.00B	--	--	--
Thallium	--	--	--	--	--	--	--	--	0.30	--	--	--	--
Vanadium	--	--	--	--	--	11.00B	7.7B	16.00	36.00	9.50B	19.00	22.00	8.70B
Zinc	12.00B	--	--	--	--	570.00	140.00	71.00	250.00	51.00	58.00	250.00	58.00
Cyanide	--	--	--	--	--	43.00	10.6	--	--	--	--	--	--
Sulfate	219000.00	68000.00B	36000.00B	85000.00	88000.00	--	--	--	--	--	--	--	--

-- indicates compound was analyzed but not detected.

FIGURE 3.

CELOTEX CORP. DUMP SITE
ILD 981961634
1988 AIR PHOTO

N↑

SAMPLE DESCRIPTIONS TABLE 1

Celotex Corp.
Dump

TABLE 1

SAMPLE #	DEPTH	APPERANCE	LOCATION
X201	0–4 inches	sandy, silt	Wilmington Park Wilmington, IL
X202	0–4 inches	sandy, silt dark brown	100 feet from Kankakee River @ the PPE, near the waste water plant
X203	0–4 inches	decaying matter silt	up stream of X202, drainage collection area from the site
X204	0–6 inches	sandy, silt	southern end of forested wetland
X205	0–6 inches	clay, silt	573 feet from X204, moving down stream in the forested wetland
X206		duplicate of X205	
X207	0–6 inches	silt	30 foot by 45 foot basin, near a city sewer line
X208	0–6 inches	sandy, silt light brown	center ponded area has a deep layer of asphalt
X209	0–5 inches	sandy, silt	200 feet up stream of the confluence of Forked Creek & Kankakee River
X210		sandy, silt	500 feet up stream of the Kankakee St. bridge on Forked Creek

APPENDIX

E

CERCLA INSPECTION PHOTOGRAPHS

Date: 8/22/97

Time: 7:50

Photo Taken By: Mark Wagner

Location/ILD#: CELOTEX DUMP SITE
ILD 981961634
Direction: north

Description: photo 1, sample X107

Date: 8/22/97

Time: 7:50

Photo Taken By: Mark Wagner

Location/ILD#: CELOTEX DUMP SITE
ILD 981961634
Direction: south

Description: photo 2, sample X107

Date: 8/22/97

Time: 8:15

Photo Taken By: Mark Wagner

Location/ILD#: CELOTEX DUMP SITE
ILD 981961634
Direction: north

Description: photo 3, sample X108

Date: 8/22/97

Time: 8:15

Photo Taken By: Mark Wagner

Location/ILD#: CELOTEX DUMP SITE
ILD 981961634
Direction: south

Description: photo 4, sample X108

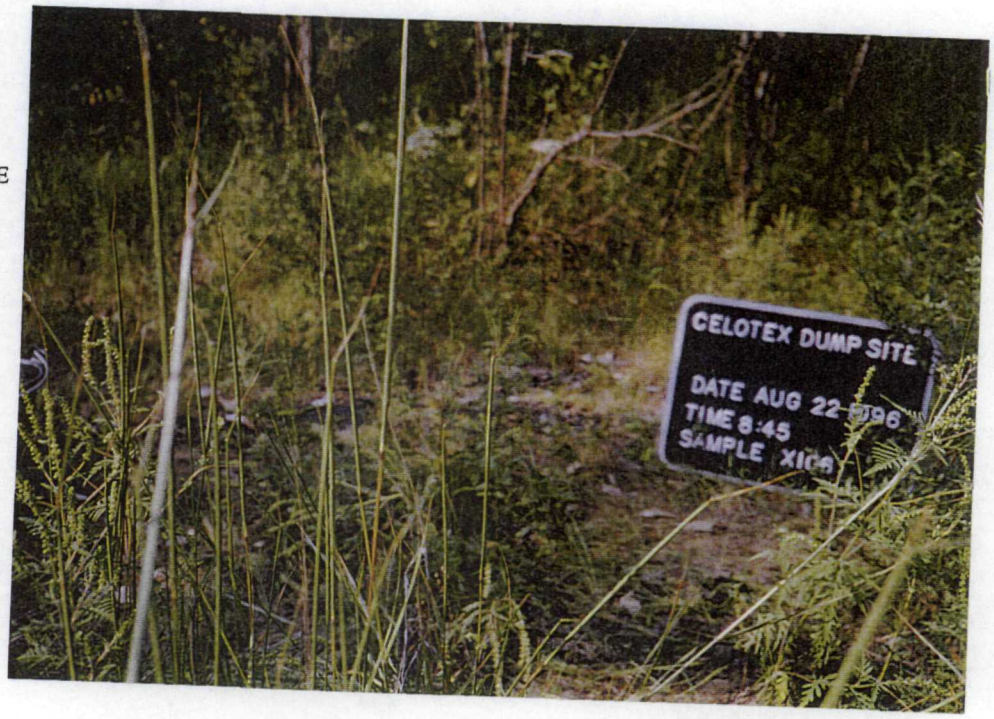
Date: 8/22/97

Time: 8:45

Photo Taken By: Mark Wagner

Location/ILD#: CELOTEX DUMP SITE
ILD 981961634
Direction: north

Description: photo 5, sample X106



Date: 8/22/97

Time: 8:45

Photo Taken By: Mark Wagner

Location/ILD#: CELOTEX DUMP SITE
ILD 981961634
Direction: south

Description: photo 6, sample X106

Date: 8/22/97

Time: 9:45

Photo Taken By: Mark Wagner

Location/ILD#: CELOTEX DUMP SITE
ILD 981961634
Direction: north

Description: photo 7, sample X105

Date: 8/22/97

Time: 9:45

Photo Taken By: Mark Wagner

Location/ILD#: CELOTEX DUMP SITE
ILD 981961634
Direction: south

Description: photo 8, sample X105

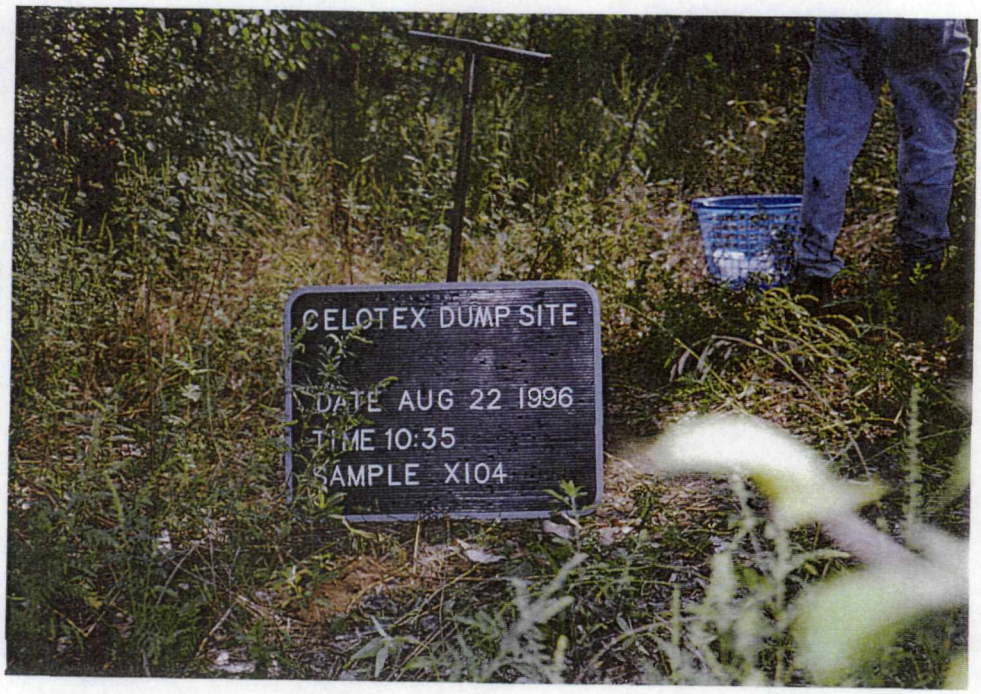
Date: 8/22/97

Time: 10:35

Photo Taken By: Mark Wagner

Location/ILD#: CELOTEX DUMP SITE
ILD 981961634
Direction: north

Description: photo 9, sample X104



Date: 8/22/97

Time: 10:35

Photo Taken By: Mark Wagner

Location/ILD#: CELOTEX DUMP SITE
ILD 981961634
Direction: south

Description: photo 10, sample X104

Date: 8/22/97

Time: 11:50

Photo Taken By: Mark Wagner

Location/ILD#: CELOTEX DUMP SITE
ILD 981961634
Direction: north

Description: photo 11, sample G102

Date: 8/22/97

Time: 11:50

Photo Taken By: Mark Wagner

Location/ILD#: CELOTEX DUMP SITE
ILD 981961634
Direction: south

Description: photo 12, sample G102

Date: 8/22/97

Time: 14:15

Photo Taken By: Mark Wagner

Location/ILD#: CELOTEX DUMP SITE
ILD 981961634
Direction: east

Description: photo 13, sample X101

Date: 8/22/97

Time: 14:15

Photo Taken By: Mark Wagner

Location/ILD#: CELOTEX DUMP SITE
ILD 981961634
Direction: north

Description: photo 14, sample X101